



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1550  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/723,041

11/26/2003

Bruce Edward LaVigne

200311029-1

7830

22879 7590 04/20/2007

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

HOSSAIN, IBRAHIM M

ART UNIT

PAPER NUMBER

2145

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

04/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/723,041	Applicant(s) LAVIGNE ET AL.	
	Examiner Ibrahim Hossain	Art Unit 2145	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/26/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: In claim 10 line 3 claimed "IP hash table", which is not explained in the specification. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,4-9,11,18-22, and 29 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bussiere (6,041,042) in view of See (U.S.2004/0003094).

Regarding claim 1, Bussiere discloses a method for remote mirroring of network traffic, the method comprising:

receiving a data packet (Bussiere , 20, fig 3) to be remotely mirrored by an entry device pre-configured with a destination (Bussiere, col. 5, lines 44-49; col. 8, lines 55-58) to which to mirror the data packet (Bussiere, 20, 32, fig 3, col. 5, lines 35-49; col. 5, line 65 to col.6, line 11);

generating and adding an header to encapsulate the data packet (Bussiere, 25, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 11),

wherein the header includes the destination address (Bussiere, packet is prepended by encapsulation logic which discloses the path to reach the analyzer destination address, 25, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 20);

forwarding (Bussiere, 26, fig 3) the encapsulated packet to an exit device (Bussiere, 29, fig 3) associated with the destination address (Bussiere, 26, 29, fig 3, col 5, lines 35-49; col 5, line 65-col 6, line 20).

Bussiere discloses generating and adding a header to encapsulate the data packet (Bussiere, column 5, line 66-col.6, line 20). Bussiere does not specifically disclose IP headers and IP addresses. Bussiere does teach generating headers and adding a header for data packets transmitted over a WAN (col 8, lines 55-58). However, See, in the same field of endeavor, discloses encapsulating a packet with an IP header and an IP address for mirroring network traffic (See, Paragraphs 0038 -0039).

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of See's method to modify in Bussiere's method. The motivation would have been to update the invention of Bussiere to be used within the internet environment.

Regarding claim 2, Bussiere-See further discloses further discloses determining a media access control (MAC) address associated with the destination address (Bussiere, col 4, lines 48-59; col 7, lines 35-67);

generating (25, fig 2) and adding a MAC header to the encapsulated packet to form a MAC data frame (Bussiere, col 4, lines 48-59; col 7, lines 35-67), wherein the MAC header includes the MAC address in a destination field (Bussiere, col 4, lines 48-59; col 7, lines 42-67);

transmitting (26, fig 3) the MAC data frame to communicate the encapsulated packet, across a layer 2 domain (egress device, fig 1, col 1, lines 35 -54). See, discloses the IP header and IP address (See, Paragraphs 0038 -0039).

Regarding claim 4, Bussiere-See further discloses, wherein the IP-encapsulated packet is communicated across at least one intermediate layer 2 domain (See, fig.4, 452 and 406, packet is communicated with layer2, Paragraph 0053).

Regarding claim 5, Bussiere-See further discloses receiving the IP-encapsulated packet (See, paragraph 0007) by the exit device (Target network device is a exit device, See, Fig.2, 110, paragraph 0038);

removing the IP header to de-encapsulate the packet (Mirrored Flow encapsulated header is removed, See, paragraph 0049)

Regarding claim 6, Bussiere-See further discloses wherein the remote mirroring preserves an original format of the data packet (Ingress device preserve original format of the data packet, Bussiere, Fig., col. 7, lines 25-40) (See, paragraph 0049).

Regarding claim 7, Bussiere-See further discloses pre-configuring the entry device (ingress device) to mirror data packets from at least one specified port (Bussiere, mirror from port, fig.2, 13) of the entry device (Bussiere, fig.2, col.5, lines 7-27)

Regarding claim 8, Bussiere-See further discloses pre-configuring the entry device (Bussiere, ingress device). Bussiere fails to disclose mirror data packets which includes a VLAN tag with at least one specified VLAN identifier. However, See in the same field of endeavor, discloses mirror data packets (See, fig.1, 106, Source network device is entry device to mirror data packet, paragraph 0029), which includes a VLAN tag with at least one specified VLAN identifier (See, paragraphs 0017 and 0039).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teaching of See's method to modify in Bussiere's method. The motivation would have been increase the effectiveness of the invention of Bussiere by using virtual network.

Regarding claim 9, Bussiere discloses pre-configuring the entry device (Bussiere, Fig.2, col.5, lines 6-11). Bussiere fails to disclose Mac look-up table. However, See in the same field of endeavor, discloses pre-configuring the entry device to mirror data packets which include MAC addresses that match at least one entry in a MAC look-up table (lookup cache Fig.2, 224 determine how the packet is to be processed ENCAP (220), DECAP (222), paragraphs 0035 and 0039).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teaching of See's method to modify in Bussiere's method. The motivation would have been to help the packet route to the destination host.

Regarding claim 11, Bussiere-See further discloses pre-configuring the entry device to mirror data packets (See, fig.1, 106, Source network device is entry device to mirror data packet, paragraph 0029), which include an IP destination address that matches at least one specific subnet entry (the source network devices, See, paragraph 0045) in a best matching prefix (BMP) table (conventional destination address table match the source address, See, paragraph 0045).

Regarding claim 18, Bussiere discloses a networking device comprising:  
a plurality of ports for receiving and transmitting packets therefrom (Bussiere, fig.2, there is a plurality of ports for receiving and transmitting packets, col.5, lines 7-39);

a switching/routing engine (a router engine acts as a junction between two or more networks to transfer data packets among them, Bussiere, fig.2) coupled to the ports for transferring the packets there between (ingress device, trunk device, egress device they are transferring the packets, Bussiere, fig.2, col.5, lines 7-39);

a remote mirroring engine configured to detect packets from a specified mirror source (Bussiere, fig.4, 41,42,43, col. 6, lines 38-50), encapsulate the detected packets (Bussiere, col.5, lines 20-50) and forward (Bussiere, 26,fig.3) the encapsulate packets to destination by way of least one of the ports Bussiere, 26,29,fig.3, col.3, lines 35-49;

Art Unit: 2145

col.5, line65- col.6, line 20). Bussiere does teach generating headers and adding a header for data packets transmitted over a WAN (col 8, lines 55-58). Bussiere does not specifically disclose IP header and IP-address. However, See, in the same field of endeavor, discloses encapsulating a packet with an IP header and IP address for mirroring network traffic (See, Paragraphs 0038 -0039).

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of See's method to modify in Bussiere's method. The motivation would have been to update the invention of Bussiere to be used within the internet environment.

Regarding claim 19, Bussiere-See further discloses wherein the specified mirror source comprises at least one of said ports (Bussiere, col.5, lines 6-11).

Regarding claim 20, Bussiere-See further discloses wherein the specified mirror source (ingress device is a specific mirror source Bussiere, fig.2, col.5, lines 6-11), Bussiere fails to disclose VLAN. However, See in the field of endeavor, comprises at least one specified VLAN (See, paragraphs 0017 and 0039).

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of See's method to modify in Bussiere's method. The motivation would have been increase the effectiveness of the invention of Bussiere by using virtual network.



Regarding claim 21, Bussiere-See further discloses wherein the specified mirror source comprises those packets (Bussiere, fig.2, col.5, lines 7-27), However, See in the same field of endeavor, discloses matching entries in a look-up table (lookup cache Fig.2, 224 determine how the packet is to be processed ENCAP (220), DECAP (222), See, paragraphs 0035 and 0039).

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of See's method to modify in Bussiere's method. The motivation would have been to help the packet route to the destination host.

Regarding claim 22, Bussiere-See further discloses wherein the specified mirror source comprises at least one specified subnet (Bussiere, fig.2, showed a subnet is to a network what a network is to an internet).

Regarding claim 29, Bussiere-See discloses an apparatus for remote mirroring of network traffic, the method of claim 1. applicants are invoking 35 U.S.C. 112, six paragraph with claim 29 which encompass a system including means for receiving a data packet, means for generating and adding an IP header, and means for forwarding the IP-encapsulated.

means for receiving a data packet (Bussiere , 20, fig 3) to be remotely mirrored by an entry device pre-configured with a destination (Bussiere, col. 5, lines 44-49; col.

Art Unit: 2145

8, lines 55-58) to which to mirror the data packet (Bussiere, 20, 32, fig 3, col. 5, lines 35-49; col. 5, line 65 to col.6, line 11);

means for generating and adding an header to encapsulate the data packet (Bussiere, 25, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 11),

wherein the header includes the destination address (Bussiere, packet is prepended by encapsulation logic which discloses the path to reach the analyzer destination address, 25, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 20);

means for forwarding (Bussiere, 26, fig 3) the encapsulated packet to an exit device (Bussiere, 29, fig 3) associated with the destination address (Bussiere, 26, 29, fig 3, col 5, lines 35-49; col 5, line 65-col 6, line 20).

Bussiere discloses generating and adding a header to encapsulate the data packet (Bussiere, column 5, line 66-col.6, line 20). Bussiere does not specifically disclose IP headers and IP addresses. Bussiere does teach generating headers and adding a header for data packets transmitted over a WAN (col 8, lines 55-58). However, See, in the same field of endeavor, discloses encapsulating a packet with an IP header and an IP address for mirroring network traffic (See, Paragraphs 0038 -0039).

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of See's method to modify in Bussiere's method. The motivation would have been to update the invention of Bussiere to be used within the Internet environment.

3. Claim 3 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Bussiere, (6,041,042) in view of See (U.S. 2004/0003094) as applied to claim 2 above, and further in view of Chari et al. U.S. 2004/0264435 A1

Regarding claim 3, Bussiere-See discloses destination IP address and MAC address (See, paragraph 0016). Bussiere-See fails to disclose determining if a mapping of the destination IP address to the MAC address is stored in an address resolution protocol (ARP) cache; if so, then retrieving the MAC address from the ARP cache; if not, then broadcasting an ARP request with the destination IP address and receiving an ARP reply with the MAC. However, Chari, in the same field of endeavor, discloses determining if a mapping of the destination IP address to the MAC address is stored in an address resolution protocol (ARP) cache (Chari, paragraph 0067); if so, then retrieving the MAC address from the ARP cache (ARP is generally is protocol for the resolution of IP address to MAC address, Chari, paragraph 0067); if not, then broadcasting an ARP request with the destination IP address and receiving an ARP reply with the MAC (gateway then responds to the access node with the replay received, Chari, paragraphs 0067, 0068, and 0069)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Chari's method to modify in Bussiere-See's method. The motivation would have been used to identify the source and destination information from ARP to send packets mirroring from one network device to the other.

4. Claim 10 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Bussiere, (6,041,042) in view of See (U.S. 2004/0003094) as applied to claim 1 above, and further in view of Howes et al. (6,445,704)

Regarding claim 10, Bussiere-See further discloses pre-configuring the entry device data packet (SND device is entry device, See, fig.1, 106, Paragraphs 0029 and 0053) See-Bussiere fails to disclose include IP addresses that matches at least one in an hash table. However, Howes, in the same field of endeavor, discloses include IP addresses that matches at least one in an hash table (Howes, col.11, lines 41-50)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Howes's method to modify in Bussiere-See's method. The motivation would have been increasing routing.

5. Claims 12 and 23 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bussiere, (6,041,042) in view of See (U.S. 2004/0003094) as applied to claims 1 and 18 above, and further in view of Haverinen et al. (U.S. 2004/0208151).

Regarding claim 12, Bussiere-See further discloses pre-configuring the entry device to mirror data packets (See, fig.1, 106, Source network device is entry device to mirror data packet, paragraph 0029). See-Bussiere fails to disclose matching at least one access control list (ACL) entry. However, Haverinen, in the same field of endeavor,

Art Unit: 2145

discloses matching at least one access control list (ACL) entry (Haverinen, paragraph 0030)

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teaching of Haverinen's method to modify in Bussiere-See's method. The motivation would have been to improve security of the devices.

Regarding claim 23, Bussiere-See further discloses wherein the specified mirror source comprises those packets (See, fig.1, 106, Source network device is entry device to mirror data packet, paragraph 0029). See-Bussiere fails to disclose matching at least one access control list (ACL) entry. However, Haverinen, in the same field of endeavor, discloses matching at least one access control list (ACL) entry (Haverinen, paragraph 0030)

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teaching of Haverinen's method to modify in Bussiere-See's method. The motivation would have been to improve security of the devices.

6. Claims 13-14 and 24-25 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bussiere, (6,041,042) in view of See (U.S. 2004/0003094) as applied to claims 1 and 18 above, and further in view of Mullendore et al. (U.S. 2003/0185154).

Regarding claim 13, See-Bussiere further discloses configuring the entry device (See, fig.1, 106, SNS is entry device) in a best effort mirroring mode (the SND 106 configured to direct a copy of the traffic to another network device without altering the contents including the Layer 2 and Layer 3 addressing information of the packets as received by original network device, See, Paragraph 0029). See-Bussiere fails to disclose reduce head-of- blocking. However, Mullendore, in the same field of endeavor, discloses reduce head-of- blocking (Mullendore teaches reduce head-of-blocking and network latency, paragraph 0017)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Mullendore's method to modify in Bussiere-See's method. The motivation would have been reducing and monitoring network congestion operation request received by network device.

Regarding claim 14, See-Bussiere discloses configuring the entry device mirroring made to assure completeness of mirrored traffic (See, paragraph 0029) See-Bussiere fails to disclose configuring lossless traffic. However, Mullendore, in the same field of endeavor, discloses a lossless traffic (loss of data with in a network traffic, Mullendore, paragraph 0010)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Mullendore's method to modify in Bussiere-See's method. The motivation would have been reducing and monitoring network congestion operation request received by network device.

Art Unit: 2145

Regarding claim 24, See-Bussiere further discloses the device includes a best effort mirroring mode (the SND 106 configured to direct a copy of the traffic to another network device without altering the contents including the Layer 2 and Layer 3 addressing information of the packets as received by original network device, See, Paragraph 0029). See-Bussiere fails to disclose reduce head-of-blocking. However, Mullendore, in the same field of endeavor, discloses reduce head-of-blocking (Mullendore teaches reduce head-of-blocking and network latency, paragraph 0017)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Mullendore's method to modify in Bussiere-See's method. The motivation would have been reducing and monitoring network congestion operation request received by network device.

Regarding claim 25, See-Bussiere fails to disclose the device includes a lossless mirroring mode to assure completeness of mirrored traffic. However, Mullendore, in the same field of endeavor, discloses a lossless traffic (loss of data with in a network traffic, Mullendore, paragraph 0010)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Mullendore's method to modify in Bussiere-See's method. The motivation would have been reducing and monitoring network congestion operation request received by network device.

7. Claims 15-17, and 26-28 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bussiere, (6,041,042) in view of See (U.S. 2004/0003094) as applied to claims 1 and 18 above, and further in view of Staheli et al. (5,537,533)

Regarding claim 15, Bussiere-See further discloses the IP-encapsulated packet prior to forwarding thereof address (Bussiere, 26, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 20). Bussiere-See fails to disclose truncating the data packet to reduce a size. However, Staheli in the same field of endeavor discloses truncating the data packet to reduce a size (Staheli, discloses the computer network's performance reduces data size while data being restored in the different device e.g. hard drive, col.3, lines 3-9)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Staheli's method to modify in Bussiere-See's method. The motivation would have been to increase security of the data packets.

Regarding claim 16, Bussiere-See further discloses the IP-encapsulated packet prior to forwarding thereof address (Bussiere, 26, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 20). Bussiere-See fails to disclose compressing the data packet to reduce a size. However, Staheli in the same field of endeavor, discloses compressing the data packet (Staheli, col.6, lines 1-3) to reduce a size (Staheli, discloses the computer network's performance reduces data size while data being restored in the different device e.g. hard drive, col.3, lines 3-9)



It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teaching of Staheli's method to modify in Bussiere-See's method. The motivation would have been to send smaller packets to increase the speed of the system.

Regarding claim 17, Bussiere-See further discloses forwarding the IP-encapsulated (Bussiere, 26, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 20). Bussiere-See fails to disclose encrypting at least a portion of the data packet to provide a level of security prior to. However, Staheli in the same field of endeavor, discloses encrypting at least a portion of the data packet to provide a level of security prior to (Staheli teaches data encrypted by the primary DTU before it placed to the communication link to provide a level of security, (col.5, lines 63-col.6, lines 3)

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teaching of Staheli's method to modify in Bussiere-See's method. The motivation would have been to increase security of the data packets.

Regarding claim 26, Bussiere-See further discloses the IP-encapsulated packet prior to forwarding thereof address (Bussiere, 26, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 20). Bussiere-See fails to disclose truncating the data packet to reduce a size. However, Staheli in the same field of endeavor, discloses truncating the data packet to reduce a size (Staheli, discloses the computer network's performance reduces

Art Unit: 2145

data size while data being restored in the different device e.g. hard drive, col.3, lines 3-9)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Staheli's method to modify in Bussiere-See's method. The motivation would have been to send smaller packets to increase the speed of the system.

Regarding claim 27, Bussiere-See further discloses the IP-encapsulated packet prior to forwarding thereof address (Bussiere, 26, fig 3, col 5, lines 35-49; col 5, line 65 to col 6, line 20). Bussiere-See fails to disclose compressing the data packet to reduce a size. However, Staheli in the same field of endeavor, discloses compressing the data packet (Staheli, col.6, lines 1-3) to reduce a size (Staheli, discloses the computer network's performance reduces data size while data being restored in the different device e.g. hard drive, col.3, lines 3-9)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Staheli's method to modify in Bussiere-See's method. The motivation would have been to send smaller packets to increase the speed of the system.

Regarding claim 28, Bussiere-See further discloses IP-encapsulated packet (Bussiere, col.5, line 20-50). Bussiere-See fails to disclose the device encrypt at least a portion of the data packet to provide a level of security prior to forwarding. However,

Staheli in the same field of endeavor, discloses encrypting at least a portion of the data packet to provide a level of security prior to (Staheli teaches data encrypted by the primary DTU before it placed to the communication link to provide a level of security, (col.5, lines 63-col.6, lines 3)

It would have been obvious to one have ordinary skill in the art at the time of the invention was made to combine the teaching of Staheli's method to modify in Bussiere-See's method. The motivation would have been to increase security of the data packets.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miloushev et al., Pub. No. US 2002/0120763, discloses an apparatus and method are provided in a computer network to decouple the client from the server, by placing a transparent network node, also termed a file switch or file switch computer, between the client and the server.

Kametani, U.S. Patent No. 6,839,346, discloses a packet switching apparatus includes a plurality of lower layer processing units, a table, and a processing unit.

Cheriton, Pub. No. US 2006/0155875, discloses a system and method for efficiently searching long strings of data, such as network messages, as described.

Lee, Pub. No. US 2004/0202163, discloses a cell processing method and apparatus in an ATM switch can reduce or prevent cell loss and throughput deterioration of the switch caused by HOL blocking.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ibrahim Hossain whose telephone number is 571-272-9593. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IH  
03/16/2007

  
JASON CARDONE  
SUPERVISORY PATENT EXAMINER